



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Asgrab Seed Company TIC

THEORES, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT. VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT. VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN SUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY CITION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2921 ET SEQ.)

SOYBEAN

'SN79628'

In Testimony Macrost, I have hereunto set my hand and caused the seal of the Hant Unriety Protection Office to be affixed at the City of Washington, D.C. this second day of May, in the year two thousand two.

Attest:

Gemzie

Commissioner
Plant Variety Protection Office
Assiruhund Maybeling Somio

l Agriculture

REPRODUCE LOCALLY. Include form number and date on all reproductions		FORM APPROVED - OMB NO. 0581-00		
U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE	The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a)			
SCIENCE DIVISION - PLANT VARIETY PROTECTION OFFICE	Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).			
APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE (Instructions and information collection burden statement on reverse)	0.3.C. 2421). Information is flexi confiden	ilias uniti certificate is issued (7 0.3.0, 2420).		
1. NAME OF APPLICANT(S) (as it is to appear on the Certificate)	2. TEMPORARY DESIGNATION OR	3. VARIETY NAME		
Asgrow Seed Company LLC	AGQ55910	SN79628		
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)	5. TELEPHONE (include area code)	FOR OFFICIAL USE ONLY		
	515-232-7170	2002003		
634 E. LincolnWay	6. FAX (include area code)	F DATE		
Ames, IA 50010	515-232-6905	12/05/2001		
7. GENUS AND SPECIES NAME	8. FAMILY NAME (Botanical)	F FILING AND EXAMINATION FEE		
Glycine max (L.) Merr.	8. FAMILY NAME (Botanical) Leguminosae			
	Беданинова	\$ \$2,705.00		
9. CROP KIND NAME (Common Name) Soybean		DATE 12/05/2001		
 IF THE APPLICANT NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation Name) 	n, partnership, association, etc.) (common	CERTIFICATION FEE		
Corporation		23,00		
	1	320		
11. IF INCORPORATED, GIVE STATE OF INCORPORATION Delaware	12. DATE OF INCORPORATION	3/V/02		
	December 22, 1997	1 218192		
13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APP	LICATION AND RECEIVE ALL PAPERS	14. TELEPHONE (include area code)		
Donald Steffen		515-956-3002		
634 E Lincoln Way		FAX (include area code)		
Ames, IA 50010		515-232-6905		
16. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on rever a. Exhibit A. Origin and Breeding History of the Variety b. Exhibit B. Statement of Distinctness c. Exhibit C. Objective Description of the Variety d. Exhibit D. Additional Description of the Variety e. Exhibit E. Statement of the Basis of the Applicant's Ownership f. Voucher Sample (2,600 viable untreated seeds or, for tuber propagated varieties verification that tif g. Filing and Examination Fee (\$2,705), made payable to "Treasurer of the United States" (Mail to P	issue culture will be deposited and maintained in	n a public reposition)		
17. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME	•	72 (See Section 83(a) of the Plant Variety Protection Act)		
YES (if "yes," answer items 18 and 19 below)		(2000)		
18. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?	19. IF "YES" TO ITEM 18, WHICH CLA SEED?	ASSES OF PRODUCTION BEYOND BREEDER		
☐ YES ☐ NO	☐FOUNDATION ☐ REGIST	ered 🔲 certified		
20. HAS THE VARIETY OR A HYBRID PRODUCED FROM THE VARIETY BEEN RELEASED, USED, YES (if "yes," give names of countries and dates) USA — December 11, 2000	OFFERED FOR SALE, OR MARKETED IN	THE U.S. OR OTHER COUNTRY?		
21. The applicant(s) declare that a viable sample of basic seed of the variety will be furnished with application tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the The undersigned applicant(s) is(are) the owner(s) of this sexually reproduced or tuber propagated plant varentitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. Applicant(s) is(are) informed that false representation herein can jeopardize protection and result in penaltic.	duration of the certificate. riety, and believe(s) that the variety is new, disti			
SIGNATURE OF APPLICANT (Owner(s))	SIGNATURE OF APPLICANT (Owner(s)	»		
NAME (Please print or type)	NAME (Please print or type)			
Donald Steffen				
CAPACITY OR TITLE DATE				
Manager, IP & Regulatory Affairs	CAPACITY OR TITLE	DATE		

ASGROW SEED COMPANY LLC PVP APPLICATION - SN79628

2002000392

EXHIBIT A

ORIGIN AND BREEDING HISTORY

- 1994 Final cross was made at Isabela, Puerto Rico.
 - Parentage: A5848//A5979*2/40-3-2
- 1995 F1 generation was grown at Isabela, Puerto Rico and advanced using modified single seed descent.
- 1995 F2 generation was grown at Isabela, Puerto Rico and advanced using modified single seed descent.
- 1996 F3 bulk populations were grown at Galena, Maryland and single plants pulled.
- 1996 F3 derived F4 plants were grown in progeny rows at winter nursery in Argentina and variety SN79628 was selected based on agronomic characteristics.
- 1997 F3:5 breeder seed was grown for progeny row increase and at 4 locations in Maryland.
- 1998 F6 seed was grown in yield tests at 9 locations in the eastern U.S..
- 1999 F7 seed was grown in yield tests at 19 locations thoughout the U.S.

Variety SN79628 is uniform and stable within commercially acceptable limits based on trial observations since 1997. As with any other soybean variety, variants can occur for almost any characteristic during the course of repeated sexual reproduction.

ASGROW SEED COMPANY LLC **PVP APPLICATION - SN79628** TVP#: 200200039

EXHIBIT B

ASGROW AMES AIBS

NOVELTY STATEMENT

To our knowledge, the soybean varieties that closely resemble SN79628 are A5848, and AG5602:

1.	RR™ gene	SN79628	- Present
	(Tolerance to glyphosate herbicide)	A5848	- Absent
		AG5602	- Present
2.	Hilum color	SN79628	- Imperfect Black
		A5848	- Buff
		AG5602	- Buff
3.	Pod Wall color	SN79628	- Tan
		A5848	- Tan
		AG5602	- Tan

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this collection of information is (0581-0055). The time required to complete this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact the USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY PLANT VARIETY PROTECTION OFFICE BELTSVILLE, MD 20705 EXHIBIT C (Soybean)

OBJECTIVE DESCRIPTION OF VARIETY SOYBEAN (Glycine max (L.) Merr.)

NAME OF APPLICANT(S)	Asgrow Seed Compa	ny LLC		FOR OFFICIAL USE ONLY			
ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)			54 52 54 54 54 54 54 54 54 54 54 54 54 54 54	~20020039.			
	634 E. LincolnWay Ames, IA 50010			VARIETY NAME SN79628			
			 	TEMPORARY OR EXPERIMENTAL DESIGNATION AGQ55910			
PLEASE READ ALL INSTR	UCTIONS CAREFULLY: Place the	appropriate number that describ	es the varietal character of the	his variety in the boxes below.			
Place a zero in the first box (e.g. 099 or 09) wh	en number is either 99 or less or	9 or less respectively. Data f	or quantitative			
plant characters should be ba	sed on a minimum of 100 plants. Co	mparative data should be detern	nined from varieties entered i	n the same trial. Royal			
Horticultural Society or any i	ecognized color standard may be used	l to determine plant colors; desi	gnate system used:				
Please answer all questions fo	r your variety; lack of response may (lelay progress of your applicatio	n,				
A. MORPHOLOGY							
Seed Shape:							
3 = Elon	T, and T/W ratios < 1.2)	(L/W ratio 4 = Elonga	cal-Flattened > 1.2; L/T ratio < te-Flattened > 1.2;T/W ratio > 1				
Seed Coat Color:							
1 1 = Yello	w 2 = Green	3 = Brown	4 = Black	5 = Other (Please Specify)			
Seed Coat Luster:							
1 1 = Dull	2 = Shiny						
Seed Size:							
1 4 . 5 g	rams/100 seeds						
Hilum Color:							
5 1 = Buff 6 = Black		3 = Brown ease Specify)	4 = Gray	5 = Imperfect Black			
Cotyledon Color:							
$1 \qquad 1 = Yello$	w 2 = Green						

A. MORPHOLOGY (Continued)

2002000392

Seed Protein Peroxidase Activity:

1 = Low2 = HighNOT TESTED : 12/7/2001 BT Hypocotyl Color:

1 = Green

2 = Green with Bronze 'Evans' or 'Davis' **Bands below Cotyledon** 'Woodworth' or 'Tracy'

3 = Light Purple below Cotyledons 'Beeson' or 'Pickett 71' 4 = Dark Purple extending to unifoliolate leaves ('Hodgson', 'Coker', or 'Hampton 266A')

Leaf Shape:

1 = Lanceolate

2 = Oval

3 = Ovate

4 = Other (Please Specify)

Flower Color:

1 = White

2 = Purple

3 = White with a Purple Throat

Pod Color:

1 = Tan

2 = Brown

3 = Black

Pubescence Color:

1 = Gray

2 = Brown (Tawny)

3 = Light Tawny

Plant Habit:

1 = Determinate

2 = Semi - Determinate

3 = Indeterminate

4 = Intermediate

Maturity Group:

1 = 0006 = III11 = VIII 2 = 007 = IV

3 = 08 = V

4 = I9 = VI 5 = II10 = VII

12 = IX

13 = X

14 = XI

15 = XII

Maturity Subgroup:

Please enter a value from 0 - 9

DISEASE REACTIONS

0 = Not Tested

1 = Susceptible

2 = Resistant

3 = Tolerant

Bacterial

Bacterial Pustule (Xanthomonas campestris pv. glycines (Nakano) Dye)

Bacterial Blight (Pseudomonas syringae pv. glycinea (Coerper) Young, Dye, & Wilkie)

Wildfire Blight (Pseudomonas syringae pv. tabaci (Wolf & Foster) Young, Dye, & Wilkie)

Fungal

Brown Spot (Septoria glycines Hemmi)

ъ. 1	DISEASE REAC	LITONS (Conn.	ruea) () = Not lested	Ι=	Suscep	tible 2 =	Kesistan	1 3 =	= 10	ieran	t
	Frogeye Lea	f Spot (Cercosp	ora sojina 1	Hara)			_			_		
	race 1		0 1	race 2		0	race 3		0		race	4
	race 5		0r	race 6			Other (Pleas	e Specify)				
	Target Spot	(Corynespora c	assiicola (B	erk. & Curt.) V	Vei)		6 6	200	2 0	0 0	3	9 8
0	Downey Mild	łew (<i>Peronospo</i>	ra trifolion	ım var. manch	urica (Na	um.) S	yd. ex Gäum)	•				
0	Powdery Mil	dew (<i>Microsph</i>	aera diffuso	cke. & Pk.)								
0	Brown Stem	Rot (<i>Phialophe</i>	ra gregata	(Allington & Cl	hamberlai	in) W.	Gams.)					
0	Stem Canker	(Diaporthe ph	aseolorum (Cke. & Ell.) Sa	icc. var. <i>c</i>	aulivor	ra Athow & C	aldwell)				
0	Pod and Sten	n Blight (<i>Diapo</i>	rthe phaseo	olorum (Cke. &	Ell.) Saco	e. var.	sojae (Lehma	n) Wehm	.)			
0	Purple Seed S	Stain (Cercospo	ra kikuchii	(T. Matsu. & T	Fomoyasu) Gard	ener)	·				
0	Rhizoctonia I	Root Rot (Rhize	octonia sola	<i>ni</i> Kühn)						-		
Phyto	phthora Root R	ot (<i>Phytophtho</i>	ra megaspei	rma Drechs. f. s	sp. glycine	ea (Kua	an & Erwin))					
1	race 1	2 race 8	1	7000 15		22		,				
2		1				ace 22						
2	race 3		1			ace 23						
2	1			1		ace 24						
	race 4	2 race 11		race 18		ace 25						
2	race 5	1 race 12		1		ace 26						
1	race 6	2 race 13		race 20	0 0	ther (A	Please Specify):				
1	race 7	2 race 14	1	race 21	_							
0	Bud Blight (T	obacco Ringsp	ot Virus)									
0	Yellow Mosaid	c (Bean Yellow	Mosaic Vi	rus)								
0	Cowpea Mosa	ic (Cowpea Ch	lorotic Vir	us)								
0	Pod Mottle (B	ean Pod Mottl	e Virus)									

B. D	ISEASE REACTIONS (Continued)	0 = Not Tested	1 = Susceptible	2 = Resistant	3 = Tolerant
0	Seed Mottle (Soybean Mosaic Virus	5)			
Nema	tode			2002	000392
Soybe	an Cyst Nematode (Heterodera glycine	es Ichinohe)			
0	race 1 0 race 4	0 race 9	1		
0	race 2 0 race 5	2 race 1	4 (former r. 4)		
1	race 3 0 race 6	Other	(Please Specify)		
0	Lance Nematode (Hoplolaimus colum	mbus Sher)			
2	Southern Root Knot Nematode (Me	loidogyne incognita (l	Kofoid & White) Ch	itwood)	
0	Northern Root Knot Nematode (Me	<i>loidogyne hapla</i> Chit	wood)		
0	Peanut Root Knot Nematode (Meloi	dogyne arenaria (Nea	l) Chitwood)		
0	Reniform Nematode (Rotylenchus re	eniformus Linwood &	Olivera)		
0	Javanese Nematode (Meloidogyne ja	vanica (Treub) Chitw	vood)		
	Other Nematode (Please Specify)				
C. PI	IYSIOLOGICAL RESPONSES	0 = Not Tested	1 = Susceptible	2 = Resistant	3 = Tolerant
0	Iron Chlorosis on Calcareous Soil				
0	Phosphorus				
0	Boron				
0	Aluminum		u.		
0	Salt		•		
0	Drought				
	Other (Please Specify)				

D. INSECT REACTIONS	0 = Not Tested	1 = Susceptible	2 = Resistant 3 =	= Tolerant
Mexican Bean Beetle (Epilachna v	varivestis Mulsant)		2002000	392
O Potato Leaf Hopper (Empoasca fa	bae (Harris))			
Other (Please Specify)				
E. HERBICIDE REACTIONS	0 = Not Tested	1 = Susceptible	2 = Resistant	
2 Metribuzin				
0 Bentazone				
1 Sulfonylurea				
2 Glyphosate				·
1 Glufosinate				
0 Pendimethalin				
Other (Please Specify)	······································			
F. TRANSGENIC COMPOSITION Has the development of the Subject Variety If yes, please complete the following inform 1. Please state the vector's name: 2. Please state the vector components: 3. Please describe the genetic material suc 4. Please describe the insertion protocol: * A literature citation(s) explaining the for the "Transgenic Composition" portion of the "Transgenic Composition" portion of the state of the state of the composition of the state of	nation requests*. Use ecessfully transferred our information reque	additional pages if n	iety:	
U.S. Patent No. 5,776,760. Issue Date: Ju Monsanto Company. Patent Application N	ıly 7, 1998. Inventor Io. 484,274.	: Barry, Gerard, and	d Kishore, Ganesh. A	ssignee:
ABSTRACT: Genes encoding a glyphosate transformed bacteria and plants which degrherbicide.	oxidoreductase enzyn ade glyphosate herbio	ne are disclosed. The	e genes are useful in pi plants which are tolerai	roducing at to glyphosate

G. BIOCHEMICAL MARKERS

Please describe any biochemical information here which you believe will be helpful in further describing the Subject Variety (e.g. Simple Sequence Repeats, Restriction Fragment Length Polymorphisms, Isozymic Characterization). Use additional pages if necessary.

H. COMMENTS

ASGROW SEED COMPANY LLC PVP APPLICATION - SN79628

EXHIBIT D

ADDITIONAL DESCRIPTION OF INVENTION

SN79628 is a mid maturity group V variety with resistance to Roundup tm herbicide. It has very high yield potential. It has superior yields to lines of similar maturity and has excellent agronomic characteristics, including lodging resistance. In tests, it has beaten Hartz 5545RR by 114 % overall, winning at 13 of 19 locations. It is adapted to the mid maturity group V growing areas of Maryland, Missouri, Arkansas, Illinois, Indiana, Tennessee and Kentucky. It has only average appearance.

REPRODUCE LOCALLY. Include form number and edition date on all reproducti	ions.	FORM APPROVED - OMB No. 0581-005			
U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE	The following statements are made in 1974 (5 U.S.C. 552a) and the Paper I	accordance with the Privacy Act of			
EXHIBIT E STATEMENT OF THE BASIS OF OWNERSHIP	Application is required in order to detect certificate is to be issued (7 U.S.C. 2 confidential until the certificate is issued to the certificate is included to the certificate	421). The information is held			
1. NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION	1. VARIETY NAME			
Asgrow Seed Company LLC	OR EXPERIMENTAL NUMBER AGQ55910 SN79628				
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country)	5. TELEPHONE (Include area code)	6. FAX (Include area code)			
634 E. LincolnWay	515-232-7170	515-232-6905			
Ames, IA 50010	7 DVDO NUMBER 2002	000392			
	7. PVPO NUMBER 4	V V V V V P			
8. Does the applicant own all rights to the variety? Mark an "X" in the	e appropriate block.				
If no, please explain.		YES X NO			
Is the applicant (individual or company) a U.S. National or a U.S. If no, give name of country	based company?	YES X NO			
10. Is the applicant the original owner?					
If no, please answer one of the following: .		YES X NO			
a. If the original rights to variety were owned by individual(s), is (YES NO If no, give name of count b. If the original rights to variety were owned by a company(ies) YES NO If no, give name of count	try , is (are) the original owner(s) a U.S. ba	ti.			
Please Note:					
Plant variety protection can only be afforded to the owners (not licens	sees) who meet the following criteria:				
If the rights to the variety are owned by the original breeder, that penational of a country which affords similar protection to nationals of the country which affords similar protection.	erson must be a U.S. national, national fithe U.S. for the same genus and speci	of a UPOV member country, or ies.			
If the rights to the variety are owned by the company which employ nationals of a UPOV member country, or owned by nationals of a c genus and species.					
3. If the applicant is an owner who is not the original owner, both the	original owner and the applicant must m	eet one of the above criteria.			
The original breeder/owner may be the individual or company who din Act for definitions.	ected the final breeding. See Section 4	1(a)(2) ot the Plant Variety Protection			
According to the Paperwork Reduction Act of 1995, no persons are required to respond to a for this information collection is 0581-0055. The time required to complete this information or instructions, searching existing data sources, gathering and maintaining the data needed, an	ollection is estimated to average 6 minutes per respo	nse, including the time for reviewing the			
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